

REMARKS/ARGUMENTS

Claims 1-10 and 12 are pending. By this Amendment, claim 1 is amended. Support for the amendments to claim 1 can be found, for example, in the present specification at page 2, lines 17 to 22, and in original claim 1. No new matter is added. In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

Rejection Under 35 U.S.C. §112, Second Paragraph

The Office Action rejects claims 1-7, 8 and 9 under the written description requirement of 35 U.S.C. §112, first paragraph. Applicants respectfully traverse the rejection.

The Office Action appears to indicate that the term "minimum coating temperature" in claim 1 and the term "about" in claim 5 are not supported by the disclosure of the present application as originally filed. Applicants respectfully disagree. The term "minimum coating temperature" has a literal meaning that would be apparent to any one, and especially one of ordinary skill in the art. Moreover, the present specification provides ample description of setting minimum coating temperatures, and the reasons that such minimum temperatures are set. *See, e.g.,* present specification, page 2, lines 17 to 22 ("... carried out a temperature at least equal to ..."). The term "about" in claim 5 is intended to encompass temperatures within some range of a particular temperature. The present specification describes that coating can be carried about "at a temperature as close as possible to this temperature." *See* present specification, page 3, lines 19 to 22. This passage clearly conveys possession of temperatures other than the exact temperature at which a substrate weakens. As is well-settled, to satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that

the inventor had possession of the claimed invention. *See* MPEP §2163 (citing *Moba, B.V. v. Diamond Automation, Inc.*, 66 USPQ2d 1429, 1438 (Fed. Cir. 2003)). The present specification plainly illustrates that Applicants were in possession of the concepts of minimum coating temperatures and coating at temperatures about a temperature at which a transparent plastic substrate weakens.

Claims 1-7, 8 and 9 are fully supported by the present specification. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Rejection Under 35 U.S.C. §103

A. Yang

The Office Action rejects claims 1-7, 9 and 10 under 35 U.S.C. §103(a) over EP 0 887 437 to Yang et al. ("Yang"). Applicants respectfully traverse the rejection.

Claim 1 recites "[a] process, comprising: determining a maximum usage temperature for a transparent plastic substrate; determining a minimum coating temperature for forming a coating on the transparent substrate based on the maximum usage temperature; and forming a coating on at least a portion of a transparent plastic substrate at a temperature greater than or equal to the minimum coating temperature; wherein: the maximum usage temperature is at least 90°C; and determining a minimum coating temperature comprises identifying a temperature greater than or equal to a temperature 20°C less than the maximum usage temperature" (emphasis added). Yang does not disclose or suggest such a process.

As indicated above, claim 1 requires that a minimum coating temperature for forming a coating on a transparent substrate be determined based on a maximum usage temperature of the substrate. Yang discloses forming a coating "at a temperature at least 20°C below the glass transition temperature." *See Yang*, page 2, line 58 to page 3, line 1. At the very most, Yang could be considered to disclose determining a coating temperature based on a glass

transition temperature of a substrate. However, the glass transition temperature of a substrate is different from the maximum usage temperature. For example, polycarbonate is indicated to have a glass transition temperature of about 125 to 135 °C. *See, e.g., Yang*, page 3, line 1; present specification, page 3, lines 14 to 17. By contrast, transparent plastic substrates used in motor vehicles or aircraft may have maximum usage temperatures of 90 to 100 °C. *See, e.g., present specification*, page 2, lines 3 to 5.

The processes of Yang and claim 1 involve determining coating temperatures based on different parameters. Because claim 1 affirmatively requires that the coating temperature is determined based on maximum usage temperature (not glass transition temperature), claim 1 includes a "determining" step that is neither taught nor suggested by Yang. Even if coating according to the process of Yang and the process of claim 1 were to take place at the same temperature (which Applicants do not admit), Yang could not anticipate or render obvious claim 1, because Yang does not disclose or suggest determining a coating temperature based on a maximum usage temperature.

For the reasons discussed above, a *prima facie* case of obviousness can not be made. However, even if a *prima facie* case were made, such case is rebutted by the results shown in the present specification – "[a] *prima facie* case of obviousness ... is rebuttable by proof that the claimed compounds possess unexpectedly advantageous or superior properties." *See* MPEP §2144.09 (citing *In re Papesch*, 315 F.2d 381 (C.C.P.A. 1963)). The Examples of the present specification demonstrate that forming a coating at a temperature that is equal to or exceeds a minimum temperature selected based on the maximum usage temperature of the coated substrate, such as recited in claim 1, provides superior resistance to microcracking. *See, e.g., present specification*, page 7, Table. These results are objective evidence of the improvements of the process of claim 1 over known processes as in Yang, and thus these results rebut any suggestion that it would have been obvious to modify the process of Yang as

proposed in the Office Action.

The present inventors have discovered a method for slowing down or eliminating the formation of cracks in plastic substrates, e.g., windows, even when the plastic substrates are used at high temperatures. *See, e.g.*, present specification, page 2, lines 11 to 15. Yang does not disclose or suggest the method steps of claim 1, or recognize the benefits stemming therefrom.

As explained, claim 1 would not have been rendered obvious by Yang. Claims 2-7, 9 and 10 depend from claim 1 and, thus, also would not have been rendered obvious by Yang. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

B. Yang and Hunt

The Office Action rejects claim 8 under 35 U.S.C. §103(a) over Yang in view of WO 01/02622 to Hunt et al. ("Hunt"). Applicants respectfully traverse the rejection.

For the reasons discussed above, Yang fails to disclose or suggest each and every feature of claim 1. Hunt does not remedy the deficiencies of Yang. Hunt is cited for its alleged disclosure of forming multiple coatings. *See* Office Action, pages 5 to 6. However, Hunt, like Yang, fails to disclose or suggest determining a minimum coating temperature for forming a coating on a transparent substrate based on a maximum usage temperature of the substrate. Accordingly, the combination of references fails to disclose or suggest each and every feature of claim 1.

As explained, claim 1 would not have been rendered obvious by Yang and Hunt. Claim 8 depends from claim 1 and, thus, also would not have been rendered obvious by Yang and Hunt. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

C. Yang and Reed

The Office Action rejects claim 12 under 35 U.S.C. §103(a) over Yang in view of WO 89/01957 to Reed et al. ("Reed"). Applicants respectfully traverse the rejection.

For the reasons discussed above, Yang fails to disclose or suggest each and every feature of claim 1. Reed does not remedy the deficiencies of Yang. Reed is cited for its alleged disclosure of automobile lights formed from polycarbonate. *See* Office Action, page 7. However, Reed, like Yang, fails to disclose or suggest determining a minimum coating temperature for forming a coating on a transparent substrate based on a maximum usage temperature of the substrate. Accordingly, the combination of references fails to disclose or suggest each and every feature of claim 1.

As explained, claim 1 would not have been rendered obvious by Yang and Reed. Claim 12 depends from claim 1 and, thus, also would not have been rendered obvious by Yang and Reed. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

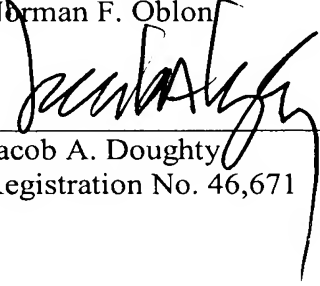
Conclusion

For the foregoing reasons, Applicants submit that claims 1-10 and 12 are in condition for allowance. Prompt reconsideration and allowance are respectfully requested.

Respectfully submitted,

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